



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
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C10

Job Sheet 192146



Part No: C10

Job Qty: 1 pcs

Part Name: C-Series Remote Hook 10,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/18/19

Job Tracking No:

Due Date: 4/12/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: IPP REV:A 17.10.23 NEW ISSUE DD VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	External Load - 1	1 pcs	4/12/19	4/12/19	0.00	2.00	External Load - 1		AP
							External Load - 2		
							External Load - 3		
110	External Load - 2 - B4B	1 pcs	4/12/19	4/12/19	0.00	2.00	External Load - 1 - B4B		AP 2019/05/13 Mark
							External Load - 2 - B4B		
							External Load - 3 - B4B		
120	QC 5	1 pcs	4/12/19	4/12/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 42		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							DC - 1 - B4B		
							DC - 2 - B4B		
130	DC - 1 - B4B	1 pcs	4/12/19	4/12/19	0.00	0.00	DC - 1 - B4B		DAS 30 9-89
							DC - 2 - B4B		
140	Packaging 3-1 - Stock - B4B	1 pcs	4/12/19	4/12/19	0.00	0.00	Packaging 3 - 1 - B4B		DAS 30 9-89
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		



Container No: S163977



Part: C10

Job No: 192146

Serial No/Batch: S163977

Revision: 3

Inspector:

Exp Date:

Instructions:

Date: 03/19/19

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				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
200	QC 21 - FG	1 pcs	4/12/19	0.00 0.00	QC 21 - FG - 21
					QC 21 - FG - 70
					QC 21 - SA - 53
Part Op 100 - Issue S/N Descriptions: 110 - Small Fab - 1- PICK C10-2 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3. 2- ASSEMBLE AS PER DWG 3- PERFORM ALL NECESSARY TEST USING FAI TEST SHEET. 120 - QC5- Inspect part completeness to step on W/O 130 - Document Control - Photocopy blue file and create labels 140 - Identify as per dwg & Stock Location: _____ 200 - QC21- Final Inspection - Work Order Release					

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1/4-20-3/8	Set Screw	2 Ea (2 ea)	100-External Load - 1	5048557
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	110-External Load - 2 - B4B	5073061
188-SHCS-1032-3/4	Bolt	8 Ea (8 ea)	110-External Load - 2 - B4B	5049355
2595K2	Heat Shrink	1 ft (1 ea)	110-External Load - 2 - B4B	5049117
32446	Crimp Terminal	2 Ea (2 ea)	110-External Load - 2 - B4B	5089146
32448	16-14 AWG Knife Connector	2 Ea (2 ea)	110-External Load - 2 - B4B	5041618
AN4-23A 24A	Bolt	2 Ea (2 ea)	110-External Load - 2 - B4B	5136710
AN6-31A	Bolt	6 Ea (6 ea)	110-External Load - 2 - B4B	5092299
C10-1	Side Plate Solenoid Side	1 Ea (1 ea)	110-External Load - 2 - B4B	5103380
C10-10-1 PO	Actuator Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5125620
C10-10-2 P	Actuator Pin	1 pcs (1 ea)	110-External Load - 2 - B4B	5029190
C10-10-3	Actuator Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5082408
C10-11	Manual Release Knob	1 pcs (1 ea)	110-External Load - 2 - B4B	5102125
C10-12	Solenoid	1 pcs (1 ea)	110-External Load - 2 - B4B	5103924
C10-12-1	Spring Pin	1 pcs (1 ea)	110-External Load - 2 - B4B	5068046
C10-2	Side Plate - MRK	1 Ea (1 ea)	110-External Load - 2 - B4B	5104541
C10-21-1	Clock Spring	2 pcs (2 ea)	110-External Load - 2 - B4B	5029195
C10-21-2	Spring Cover	2 pcs (2 ea)	110-External Load - 2 - B4B	5108588
C10-21-4	Lock Washer	8 Ea (8 ea)	110-External Load - 2 - B4B	5124824
C10-22	Lock Bumper	3 pcs (3 ea)	110-External Load - 2 - B4B	5123737
C10-23	Keeper Weldment	1 pcs (1 ea)	110-External Load - 2 - B4B	5097495
C10-23-1 P	Keeper Spacer	1 pcs (1 ea)	110-External Load - 2 - B4B	5029200
C10-23-2	Keeper Spring	1 pcs (1 ea)	110-External Load - 2 - B4B	5060601
C10-23-3	Keeper Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5029201
C10-3	Load Beam Bumper	1 pcs (1 ea)	110-External Load - 2 - B4B	5085088
C10-4	Lock	1 pcs (1 ea)	110-External Load - 2 - B4B	5029206
C10-4-10 P	Spring Anchor Pin	2 pcs (2 ea)	110-External Load - 2 - B4B	5029208
C10-4-11	Lock Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5090251
C10-4-2	Lower Lock Roller	1 pcs (1 ea)	110-External Load - 2 - B4B	5029210
C10-4-3 P	Upper Lock Roller	1 pcs (1 ea)	110-External Load - 2 - B4B	5029212
C10-4-4 P	Upper Lock Roller Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5029213
C10-4-5 P	Lower Lock Roller Shaft	1 pcs (1 ea)	110-External Load - 2 - B4B	5029214
C10-4-6	Lock Spring	1 pcs (1 ea)	110-External Load - 2 - B4B	5029215
C10-4-7 P	Spring Retaining Pin	1 pcs (1 ea)	110-External Load - 2 - B4B	5029216
C10-4-8	Lock Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5074860
C10-4-9 P	Upper Roller DU Bearing	1 pcs (1 ea)	110-External Load - 2 - B4B	5029218
C10-41	Strain Relief Connector	1 Ea (1 ea)	110-External Load - 2 - B4B	5066777
C10-5A	Load Beam Assembly	1 pcs (1 ea)	110-External Load - 2 - B4B	5131994
C10-7	Locating Pin	3 pcs (3 ea)	110-External Load - 2 - B4B	5101822
C10-8	Trunnion Bushing	2 pcs (2 ea)	110-External Load - 2 - B4B	5076736
C10-9-1	Latch	1 pcs (1 ea)	110-External Load - 2 - B4B	5099191
C10-9-2	Latch Bearing	1 Ea (1 ea)	110-External Load - 2 - B4B	5141337
C10-9-4	Latch Shaft Bearing	2 pcs (2 ea)	110-External Load - 2 - B4B	5074868
C10-9-5	Latch Pin	1 pcs (1 ea)	110-External Load - 2 - B4B	5110011
C10-9-6	Latch Return Spring	2 Ea (2 ea)	110-External Load - 2 - B4B	5080841
C3-12-6	Lock Roller Pin Circlip	2 Ea (2 ea)	110-External Load - 2 - B4B	5088946
C45-12-6	Retaining Ring	2 Ea (2 ea)	110-External Load - 2 - B4B	5122623
C45-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	110-External Load - 2 - B4B	5122623
C45-8-5	Solenoid Cover	1 pcs (1 ea)	110-External Load - 2 - B4B	5046392
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	110-External Load - 2 - B4B	5066781
EL314-SJTOW	Long Line Electrical Wire, 14/3 Gauge	1 ft (1 ea)	110-External Load - 2 - B4B	5047767
MS21044N6	Nut, Self-Lock .375-24, UNJF-3B	6 Ea (6 ea)	110-External Load - 2 - B4B	5099740
MS21083N4	Nut	2 Ea (2 ea)	110-External Load - 2 - B4B	5062621
MS27039-4-08	Screw	1 Ea (1 ea)	110-External Load - 2 - B4B	5039330
NAS1149F0432P	Washer	2 Ea (2 ea)	110-External Load - 2 - B4B	5131202
NAS1149F0463P	Washer	3 Ea (3 ea)	110-External Load - 2 - B4B	5078780
NAS1149F0632P	Washer	12 Ea (12 ea)	110-External Load - 2 - B4B	5051477
01004-08-047	WIRE (CABLE 14/3)	1		5159114

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-External Load - 1	188-FPSS-1/4-20-3/8	2	122	0
110-External Load - 2 - B4B	188-FPSS-1032-1/4	2	206	0
	188-SHCS-1032-3/4	8	274	0
	2595K2	1	19	0
	32446	2	718	0
	32448	2	219	0
	AN4-23A	2	690	0
	AN6-31A	6	27	0
	C10-1	1	6	0
	C10-10-1-PO	1	2	0
	C10-10-2	1	97	0
	C10-10-3	2	17	0
	C10-11	1	9	0
	C10-12	1	6	0
	C10-12-1	1	96	0
	C10-2	1	6	0
	C10-21-1	2	54	0
	C10-21-2	2	16	0
	C10-21-4	8	253	0
	C10-22	3	15	0
	C10-23	1	5	0
	C10-23-1	1	49	0
	C10-23-2	1	31	0
	C10-23-3	2	20	0
	C10-3	1	15	0
	C10-4	1	9	0
	C10-4-10	2	88	0
	C10-4-11	1	19	0
	C10-4-2-P	1	0	0
	C10-4-3-P	1	0	0
	C10-4-4-P	1	0	0
	C10-4-5-P	1	0	0
	C10-4-6	1	14	0
	C10-4-7	1	13	0
	C10-4-8	2	9	0
	C10-4-9	1	12	0
	C10-41	1	28	0
	C10-5A	1	11	0
	C10-7	3	141	0
	C10-8-PO	2	0	0
	C10-9-1	1	20	0
	C10-9-2	1	10	0
	C10-9-4-PO	2	3	0
	C10-9-5	1	17	0
	C10-9-6	2	10	0
	C3-12-6	2	52	0
	C45-12-6	2	114	0
	C45-8-4	1	9	0
	C45-8-5	1	19	0
	EL-PLUG-M	1	33	0
	EL314-SJTOW	1	718	0
	MS21044N6	6	61	0
	MS21083N4	2	172	0
	MS27039-4-08	1	229	0
	NAS1149F0432P	2	1,615	0
	NAS1149F0463P	3	539	0
	NAS1149F0632P	12	389	0

Part Specifications

Specifications could not be found.

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Loctite 242 (M138933)

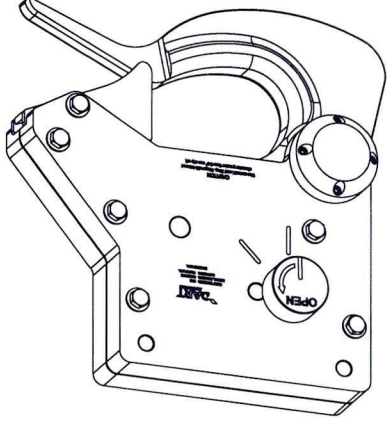
Loctite 620 (S166905)

Aeroshell grease NO. 7 (S138964)

Saf-T-eye (M128063)

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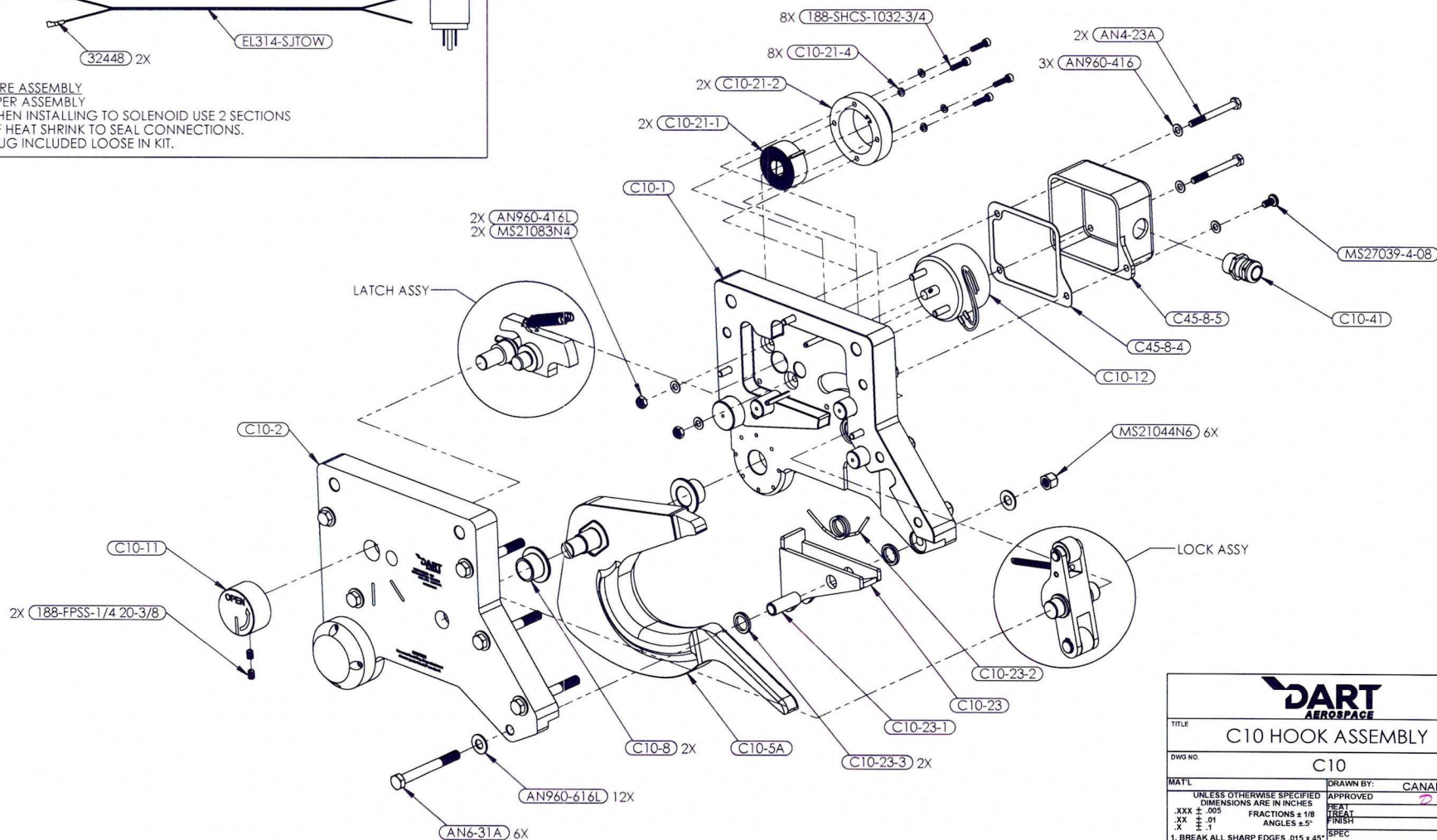
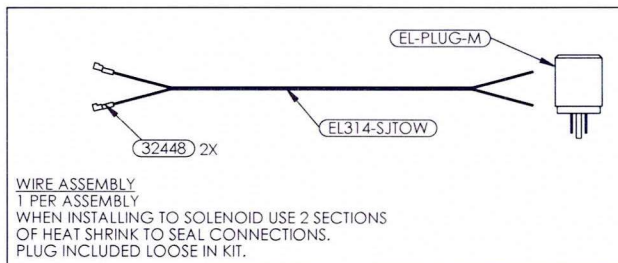
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TITLE		C10 HOOK ASSEMBLY	
PART			
DRAW NO.		C10	
MATERIAL		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS & 1/8 ANGLES > 5° FINISH TREAT SPEC	
APPROVED		CANAM 2000	
DESIGN BY:		USED ON MODEL SHEET 1 OF 4	
DATE		1.4	
SCALE		1. DRAWING LIMITS APPLY AFTER 2. PLATING 3. DR. 0.125	

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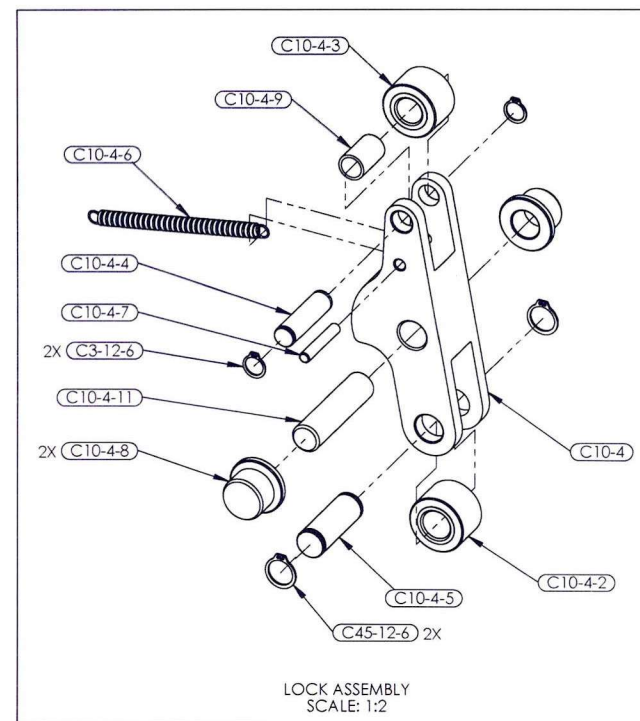
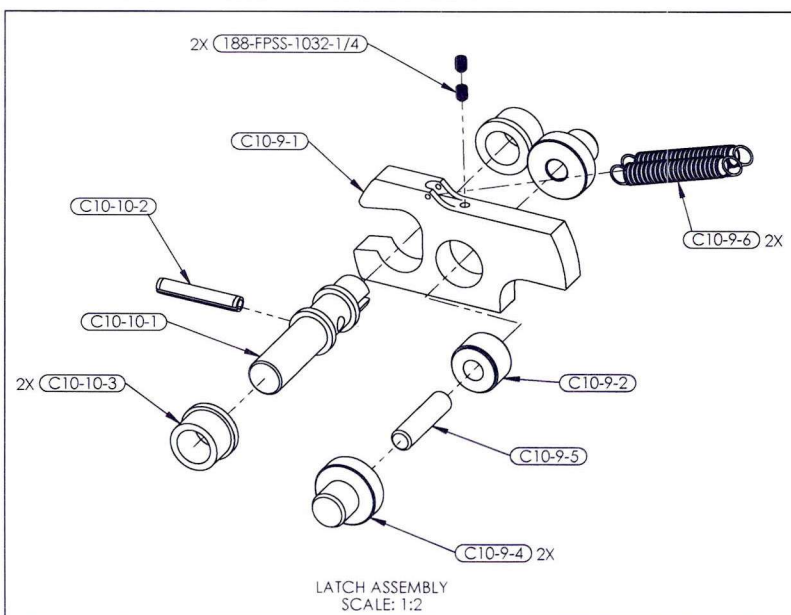
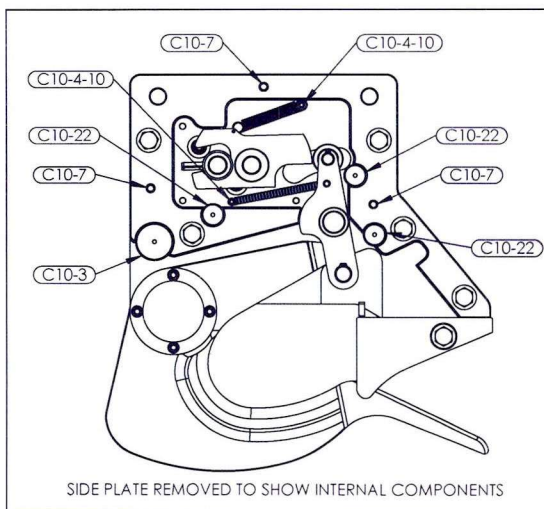
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVAL
1	14-0219	DELETED C2-14-2, 600.1309, 600.1347.	11/20/2014	RJC	JAG



DART AEROSPACE	
TITLE C10 HOOK ASSEMBLY	
DWG NO. C10	REV 3
MAT'L	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	FINISH
SPEC	
1. BREAK ALL SHARP EDGES .015 x 45°	
OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE
SHEET 2 OF 4	

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REVISIONS			
REV	ECR	DESCRIPTION	DATE INITIAL APPROVED



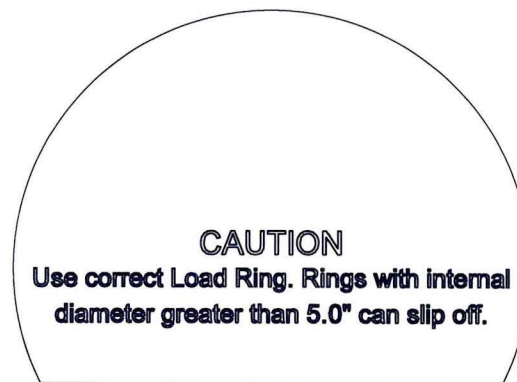
DART AEROSPACE	
TITLE C10 HOOK ASSEMBLY	
DWG NO. C10	REV 3
DRAWN BY: CANAM	
APPROVED: <i>D. Weil</i>	
MATERIAL: UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
XXX ± .005	FRACTIONS ± 1/8
XX ± .01	ANGLES ± 5°
X ± .1	FINISH
SPEC	
1: BREAK ALL SHARP EDGES .015 x 45°	
2: DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE
SHEET 3 OF 4	

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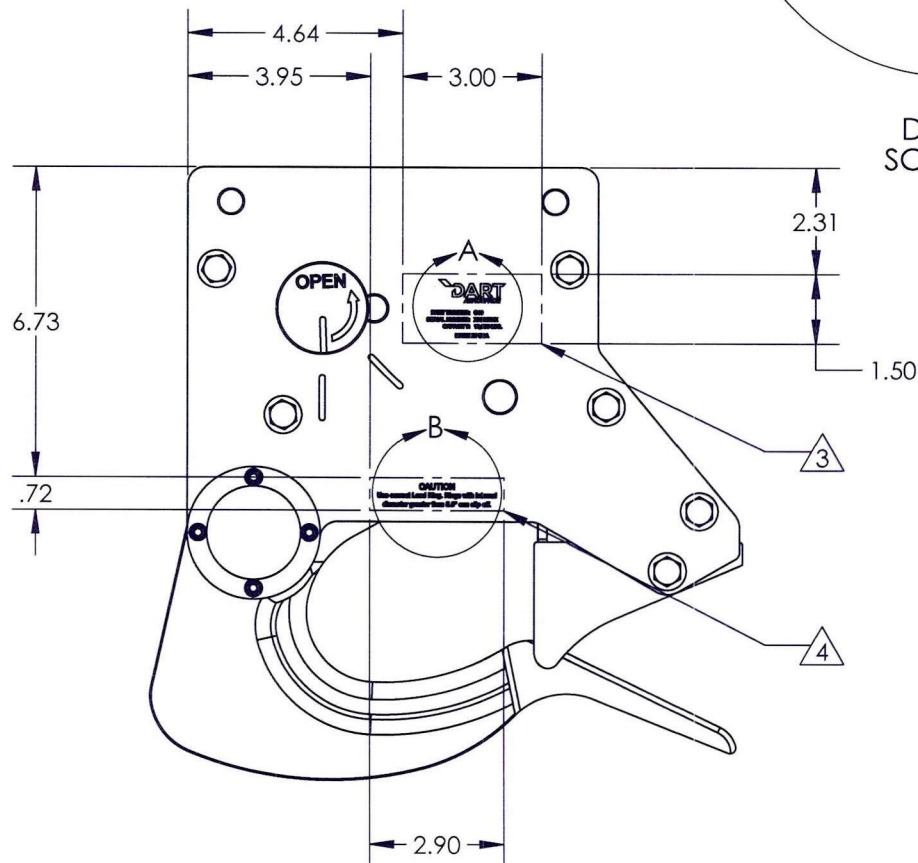
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0072	ADDED ENGRAVING NOTES AND DETAILS.	3/31/2015	DPD	JAG



DETAIL A
SCALE 1 : 1



DETAIL B
SCALE 1 : 1



NOTES:

- 3 LASER ENGRAVE DART LOGO, P/N, S/N, "MADE IN USA," WITHIN BOUNDARY.
- 4 LASER ENGRAVE CAUTION NOTE, WITHIN BOUNDARY.

DART AEROSPACE	
TITLE C10 HOOK ASSEMBLY	
DWG NO. C10	REV 3
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: CANAM APPROVED <i>D West</i> HEAT TREAT FINISH SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE SHEET 4 OF 4

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Remote Cargo Hook Test Form

C10

Work Order 192146

Customer 14556

Serial Number 5163977

Date 2019-5-10

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	25,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	Pass
10	5,000	Electircal, 25 volts	No "hang ups" permitted	N/A	Pass
2	10,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.2 Amp.	Pass
2	7,500	Electircal, 22 volts	Current shall not exceed 12.4A	8.8 Amp.	Pass
2	5,000	Electircal, 22 volts	Current shall not exceed 12.4A	8.4 Amp.	Pass
2	2,500	Electircal, 22 volts	Current shall not exceed 12.4A	8.0 Amp.	Pass
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	7.7 Amp.	Pass
1	10,000	Electircal, 20 volts	Current shall not exceed 11.3A	7.0 Amp.	Pass
1	10,000	Electircal, 28 volts	Current shall not exceed 15.8A	9.8 Amp.	Pass
1	10,000	Manual		N/A	Pass
1	10,000	Impact Test	Impact shackle 10 times, shall not release	N/A	Pass
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	2.0 Ohms	Pass
1	N/A	Electircal Continuity	Across both wires	N/A	Pass

Test Conducted By Michel Lalonde
Technician

Signature: Sylvie Pouchet
QC 5 Small FAB / QA

Submit